

### REMARKS

Claims 1-240 are in the application (claims 1-72 being in the original patent and claims 73-240 added at the time of filing of this reissue application). Claims 1-72 were allowed. Various claims were indicated as rejected for various informalities. Certain claims were rejected in view of Greszczuk and/or Hamada.

Applicant has endeavored herein to address the various informalities noted by the Examiner (Applicant appreciates the careful review and detailed comments provided by Examiner Nguyen). Applicant also has corrected certain informalities that were noted during preparation of this amendment. Applicant also wishes to provide the following additional comments.

A new oath/declaration is in process. As the inventors are no longer employed by the previous assignee, efforts are being made to locate the various inventors.

With respect to the rejection of claims 176, 184, 196, 208, 220 and 232 under Section 112 (based on the phrase "first protocol at a first point in time" and "second protocol at a second point in time"), Applicant respectfully traverses this rejection. Applicant submits that the original disclosure (see, e.g., col. 12, lines 31-36 of the issued patent) provides adequate support for this limitation.

With respect to the rejection of claims 149, 156, 163, 170, 177, 185, 197, 209, 221 and 233 (based on the phrase "protocol is determined automatically"), Applicant also respectfully traverses this rejection. Applicant submits that the original disclosure (see, e.g., col. 12, lines 1-15 of the issued patent) also provides adequate support for this limitation.

Applicant thanks Examiner Nguyen for correctly noting the error in claim 168, which has now been amended to depend from claim 167.

With respect to the rejection of claims 145, 152, 159, 166, 173, 181, 193, 205, 217 and 229 (based on the phrase "best or desired manner"), Applicant respectfully traverses this rejection based on the original disclosure (see, e.g., col. 3, lines 20-22, col. 12, lines 52-67, etc.). Applicant submits that, in view of the overall disclosure, that the subject phrase would be understood by one of skill in the art to mean an optimum or desired operation for the particular circumstances.

With respect to the rejection in paragraph no. 10 of the office action, Applicant respectfully traverses this rejection. For example, claim 74 "narrows" claim 73 by reciting particular structure (e.g., frame receiving circuitry included in the first endpoint receiver, etc.), and thus further limits the subject matter of independent claim 73. Similar analysis applies to the other rejected claims. As Applicant's attorney apparently does not understand the basis for this rejection, Applicant's attorney requests an opportunity to discuss such matters with the Examiner by way of a telephone or in-person interview.


Applicant also amended the claims to address the Markush objection, and also the rejection under 35 U.S.C. 251, which should obviate or overcome these objections/rejections.

With respect to the rejections under Section 102 and 103, Applicant submits that, as with the original claims, claims 73-240, as now presented, patentably distinguish over the cited art. The multi-tone modem disclosure of Greszczuk does not disclose Applicant's invention, and Hamada does not provide what Greszczuk is lacking. Thus, as now presented, as with the original claims, Applicant submits that all claims patentably distinguish over the cited references.

Accordingly, Applicant has endeavored herein to address the various matters raised by the Examiner and to otherwise put this application in condition for allowance.

Reconsideration and allowance is requested.

Respectfully submitted,

  
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CERTIFICATE OF MAILING (37 CFR 1.8a)

I hereby certify that the foregoing is being deposited with the U.S. Postal Service, postage prepaid, to the Assistant Commissioner for Patents, Washington, DC 20231, this 4<sup>th</sup> day of September, 2001.

  
By: Alan R. Loudermilk

receiving the second endpoint protocol signal with a first endpoint receiver;  
identifying the communication protocol indicated by the second endpoint protocol signal  
from among a plurality of possible communication protocols with which the first endpoint is  
capable of communicating; and

wherein the first endpoint transmitter communicates with the second endpoint using the  
communication protocol indicated by the second endpoint protocol signal.

181. The method of claim 180, wherein the first endpoint and the second endpoint are  
configured to operate in a best or desired manner.

182. (amended) The method of claim 180, wherein the first endpoint and the second  
endpoint are coupled together over at least one physical medium.

183. (amended) The method of claim 182, wherein the physical medium comprises one  
or more physical media selected from the group consisting of twisted pair media, coaxial cable  
media and fiber optic media.

184. The method of claim 180, wherein the first endpoint and the second endpoint  
communicate in accordance with a first protocol at a first point in time, wherein the first endpoint  
and the second endpoint communicate in accordance with a second protocol at a second point in  
time.

185. The method of claim 180, wherein the first endpoint and the second endpoint  
communicate in accordance with a communication protocol that is determined automatically.

186. The method of claim 180, wherein data communicated between the first endpoint  
and the second endpoint include isochronous data.

187. The method of claim 186, wherein the isochronous data comprises telephone data  
and/or video data.

188. The method of claim 180, wherein the first endpoint is coupled to a plurality of  
second endpoints through a plurality of physical media.

189. (amended) The method of claim 188, wherein the physical media comprises one or  
more physical media selected from the group consisting of twisted pair media, coaxial cable  
media and fiber optic media.

190. The method of claim 180, further comprising the step of establishing a direct  
connection between the first endpoint and the second endpoint.

191. The method of claim 180, wherein the first endpoint and the second endpoint communicate in accordance with one of a plurality of LAN protocols.

192. (amended) In a data communication network comprising at least one first endpoint coupled to at least one second endpoint, a method for establishing communication between a first endpoint and a second endpoint comprising the steps of:

transmitting a first endpoint protocol signal from a first endpoint transmitter to the second endpoint, the first endpoint protocol signal indicating a communication protocol, including a format for a data transmission, with which the first endpoint is capable of communicating;

identifying the communication protocol indicated by the first endpoint protocol signal from among a plurality of possible communication protocols, including a format for a data transmission, with which the second endpoint is capable of communicating; and

transmitting a second endpoint protocol signal to the first endpoint indicating that communication between the first endpoint and the second endpoint will take place with the protocol indicated by the first endpoint protocol signal.

193. The method of claim 192, wherein the first endpoint and the second endpoint are configured to operate in a best or desired manner.

194. (amended) The method of claim 192, wherein the first endpoint and the second endpoint are coupled together over at least one physical medium.

195. (amended) The method of claim 194, wherein the physical medium comprises one or more physical media selected from the group consisting of twisted pair media, coaxial cable media and fiber optic media.

196. The method of claim 192, wherein the first endpoint and the second endpoint communicate in accordance with a first protocol at a first point in time, wherein the first endpoint and the second endpoint communicate in accordance with a second protocol at a second point in time.

197. The method of claim 192, wherein the first endpoint and the second endpoint communicate in accordance with a communication protocol that is determined automatically.

198. The method of claim 192, wherein data communicated between the first endpoint and the second endpoint include isochronous data.

199. The method of claim 198, wherein the isochronous data comprises telephone data and/or video data.

200. The method of claim 192, wherein the first endpoint is coupled to a plurality of second endpoints through a plurality of physical media.

201. (amended) The method of claim 200, wherein the physical media comprises one or more physical media selected from the group consisting of twisted pair media, coaxial cable media and fiber optic media.

202. The method of claim 192, further comprising the step of establishing a direct connection between the first endpoint and the second endpoint.

203. The method of claim 192, wherein the first endpoint and the second endpoint communicate in accordance with one of a plurality of LAN protocols.

204. (amended) In a data communication network comprising at least one first endpoint coupled to at least one second endpoint, a method for establishing communication between a first endpoint and a second endpoint comprising the steps of:

transmitting a first endpoint protocol signal from the first endpoint to the second endpoint, the first endpoint protocol signal indicating one of a plurality of communication protocols, including a format for a data transmission, with which the first endpoint is capable of communicating;

receiving the first endpoint protocol signal with a second endpoint receiver;

identifying the communication protocol indicated by the first endpoint protocol signal from among a plurality of communication protocols with which the second endpoint is capable of communicating;

transmitting a second endpoint protocol signal to the first endpoint, the second endpoint protocol signal indicating the communication protocol indicated by the first endpoint protocol signal if the communication protocol indicated by the first endpoint protocol signal is a communication protocol, including a format for a data transmission, with which the second endpoint is capable of communicating;

receiving the second endpoint protocol signal with the first endpoint;

identifying the communication protocol indicated by the second endpoint protocol signal from among a plurality of communication protocols with which the first endpoint is capable of communicating;

wherein the first endpoint transmitter communicates with the second endpoint using the communication protocol indicated by the second endpoint protocol signal.

205. The method of claim 204, wherein the first endpoint and the second endpoint are configured to operate in a best or desired manner.

206. (amended) The method of claim 204, wherein the first endpoint and the second endpoint are coupled together over at least one physical medium.

207. (amended) The method of claim 206, wherein the physical medium comprises one or more physical media selected from the group consisting of twisted pair media, coaxial cable media and fiber optic media.

208. The method of claim 204, wherein the first endpoint and the second endpoint communicate in accordance with a first protocol at a first point in time, wherein the first endpoint and the second endpoint communicate in accordance with a second protocol at a second point in time.

209. The method of claim 204, wherein the first endpoint and the second endpoint communicate in accordance with a communication protocol that is determined automatically.

210. The method of claim 204, wherein data communicated between the first endpoint and the second endpoint include isochronous data.

211. The method of claim 210, wherein the isochronous data comprises telephone data and/or video data.

212. The method of claim 204, wherein the first endpoint is coupled to a plurality of second endpoints through a plurality of physical media.

213. (amended) The method of claim 212, wherein the physical media comprises one or more physical media selected from the group consisting of twisted pair media, coaxial cable media and fiber optic media.

214. The method of claim 204, further comprising the step of establishing a direct connection between the first endpoint and the second endpoint.

215. The method of claim 204, wherein the first endpoint and the second endpoint communicate in accordance with one of a plurality of LAN protocols.

216. (amended) In a data communication network comprising at least first and second endpoints, a method for establishing communication between the first and second endpoints comprising the steps of:

transmitting a first endpoint protocol signal from the first endpoint to the second endpoint, the first endpoint protocol signal indicating a communication protocol, including a format for a data transmission, with which the first endpoint is capable of communicating;

receiving the first endpoint protocol signal at the second endpoint;

transmitting a second endpoint protocol signal from the second endpoint to the first endpoint, the second endpoint protocol signal indicating a communication protocol, including a format for a data transmission, with which the second endpoint is capable of communicating;

receiving the second endpoint protocol signal at the first endpoint;

identifying the communication protocol indicated by the second endpoint protocol signal from among a plurality of possible communication protocols with which the first endpoint is capable of communicating; and

communicating between the first endpoint and the second endpoint using the communication protocol indicated by the second endpoint protocol signal.

217. The method of claim 216, wherein the first endpoint and the second endpoint are configured to operate in a best or desired manner.

218. (amended) The method of claim 216, wherein the first endpoint and the second endpoint are coupled together over at least one physical medium.

219. (amended) The method of claim 218, wherein the physical medium comprises one or more physical media selected from the group consisting of twisted pair media, coaxial cable media and fiber optic media.

220. The method of claim 216, wherein the first endpoint and the second endpoint communicate in accordance with a first protocol at a first point in time, wherein the first endpoint and the second endpoint communicate in accordance with a second protocol at a second point in time.

221. The method of claim 216, wherein the first endpoint and the second endpoint communicate in accordance with a communication protocol that is determined automatically.

222. The method of claim 216, wherein data communicated between the first endpoint and the second endpoint include isochronous data.

223. The method of claim 222, wherein the isochronous data comprises telephone data and/or video data.

224. The method of claim 216, wherein the first endpoint is coupled to a plurality of second endpoints through a plurality of physical media.

225. (amended) The method of claim 224, wherein the physical media comprises one or more physical media selected from the group consisting of twisted pair media, coaxial cable media and fiber optic media.

226. The method of claim 216, further comprising the step of establishing a direct connection between the first endpoint and the second endpoint.

227. The method of claim 216, wherein the first endpoint and the second endpoint communicate in accordance with one of a plurality of LAN protocols.

228. (amended) In a data communication network comprising at least first and second endpoints, a method for establishing communication between the first and second endpoints comprising the steps of:

transmitting a first endpoint protocol signal from the first endpoint to the second endpoint, the first endpoint protocol signal indicating a communication protocol, including a format for a data transmission, with which the first endpoint is capable of communicating;

receiving the first endpoint protocol signal at the second endpoint;

transmitting a second endpoint protocol signal, responsive to receipt of the first endpoint protocol signal, from the second endpoint to the first endpoint, the second endpoint protocol signal indicating a communication protocol, including a format for a data transmission, with which the second endpoint is capable of communicating;

receiving the second endpoint protocol signal at the first endpoint;

identifying the communication protocol indicated by the second endpoint protocol signal from among a plurality of possible communication protocols with which the first endpoint is capable of communicating; and



communicating between the first endpoint and the second endpoint using the communication protocol indicated by the second endpoint protocol signal.

229. The method of claim 228, wherein the first endpoint and the second endpoint are configured to operate in a best or desired manner.

230. (amended) The method of claim 228, wherein the first endpoint and the second endpoint are coupled together over at least one physical medium.

231. (amended) The method of claim 230, wherein the physical medium comprises one or more physical media selected from the group consisting of twisted pair media, coaxial cable media and fiber optic media.

232. The method of claim 228, wherein the first endpoint and the second endpoint communicate in accordance with a first protocol at a first point in time, wherein the first endpoint and the second endpoint communicate in accordance with a second protocol at a second point in time.

233. The method of claim 228, wherein the first endpoint and the second endpoint communicate in accordance with a communication protocol that is determined automatically.

234. The method of claim 228, wherein data communicated between the first endpoint and the second endpoint include isochronous data.

235. The method of claim 234, wherein the isochronous data comprises telephone data and/or video data.

236. The method of claim 228, wherein the first endpoint is coupled to a plurality of second endpoints through a plurality of physical media.

237. (amended) The method of claim 236, wherein the physical media comprises one or more physical media selected from the group consisting of twisted pair media, coaxial cable media and fiber optic media.

238. The method of claim 228, further comprising the step of establishing a direct connection between the first endpoint and the second endpoint.

239. The method of claim 228, wherein the first endpoint and the second endpoint communicate in accordance with one of a plurality of LAN protocols.

240. (amended) In a data communication network comprising at least one first endpoint coupled to at least one second endpoint, a method for establishing communication between a first endpoint and a second endpoint comprising the steps of:

transmitting a first endpoint protocol signal from a first endpoint transmitter to the second endpoint, the first endpoint protocol signal indicating a communication protocol, including a format for a data transmission, with which the first endpoint is capable of communicating;

identifying the communication protocol indicated by the first endpoint protocol signal from among a plurality of possible communication protocols with which the second endpoint is capable of communicating;

transmitting a second endpoint protocol signal to the first endpoint indicating that communication between the first endpoint and the second endpoint will take place with the protocol indicated by the first endpoint protocol signal;

the method further comprising the steps of:

transmitting the first endpoint protocol signal from the first endpoint to the second endpoint;

receiving the first endpoint protocol signal with a second endpoint receiver;

identifying the communication protocol indicated by the first endpoint protocol signal from among the plurality of communication protocols with which the second endpoint is capable of communicating;

transmitting the second endpoint protocol signal to the first endpoint, the second endpoint protocol signal indicating the communication protocol indicated by the first endpoint protocol signal if the communication protocol indicated by the first endpoint protocol signal is a communication protocol, including a format for a data transmission, with which the second endpoint is capable of communicating;

receiving the second endpoint protocol signal with the first endpoint;

identifying the communication protocol indicated by the second endpoint protocol signal from among a plurality of communication protocols with which the first endpoint is capable of communicating;

wherein the first endpoint transmitter communicates with the second endpoint using the communication protocol indicated by the second endpoint protocol signal;

the method further comprising the steps of:  
transmitting the first endpoint protocol signal from the first endpoint to the second  
endpoint;  
receiving the first endpoint protocol signal at the second endpoint;  
transmitting the second endpoint protocol signal from the second endpoint to the first  
endpoint;  
receiving the second endpoint protocol signal at the first endpoint;  
identifying the communication protocol indicated by the second endpoint protocol signal  
from among a plurality of possible communication protocols with which the first endpoint is  
capable of communicating; and  
communicating between the first endpoint and the second endpoint using the  
communication protocol indicated by the second endpoint protocol signal.